

**Remarks****Claim Status**

Claims 47-55 and 57-74 are pending. Claims 14-16 and 44-47 are canceled without prejudice as being directed to non-elected claims.

Claim 48 is amended without prejudice in an editorial manner and not in response to the art. For example, the amendments change the perspective of communication with a network resource, which was not questioned in the prior final rejection.

Claim 60 is amended without prejudice and in an editorial manner. This change may even broaden the scope of the claim (e.g., "at least some of . . .").

Claims 69-74 are newly presented.

**Art-based Rejections:**

Claims 48-50, 58 and 60-62 stand rejected over Iwamura (U.S. Patent No. 6,425,081) in view of Cox (U.S. Patent No. 5,930,369).

Claims 51-53, 59 and 63-65 stand rejected over Crosby (U.S. Patent No. 6,870,547) in view of Cox.

Claims 54, 55 and 57 and 66-67 stand rejected over Gindele (U.S. Patent No. 6,785,421) in view of Cox.

Claim 68 stands rejected over Gindele in view of Cox and Iwamura.

We respectfully traverse these rejections.

**Rejections over Crosby in view of Cox*****Claims 51, 63 and 66***

Crosby changes a low-resolution image through use of an edit list (e.g., XML file). The edit list may include a set of individual operations or transformations that are to be performed on a given photo. See the Crosby patent at Col. 6, lines 55-57 and Col. 6, line 62 - Col. 8, line 16.

And, in a third embodiment, the edit list includes a pointer that points to a remote image file having a higher resolution.

But recall that claim 51, 63 and 66 recite interrogating a network resource through use of inherent attributes of the changed image data (claims 51 and 63) and interrogating a network resource through use of attributes calculated or derived from the corrected media (new claim 66).

Crosby does not teach or suggest interrogating through use of such attributes, and for his network communication rather uses a “reference” to digital negative (see, e.g., col. 6, lines 36-38 and Col. 7, lines 10-12 (“<DIGITAL-NEGATIVE-LINK type=“highest\_resolution” height=“1600” width=“1200” href=“www.pictureiq.com/samples/nicholas.jpg””)) or perhaps a “pointer” to a remote image file having a higher or lower resolution (Col. 8, lines 32-36).

But the URL, above, and the discussed pointer are not based on inherent attributes of the changed image data (claims 51 and 63) or attributes calculated or derived from the corrected media (claim 66).

Citation to the Crosby patent at Col. 5, lines 48-62 and Col. 9, lines 46-50 (discussing, e.g., network environments) is not helpful to teach or suggest the acts of interrogating as recited in these claims. Indeed, the Col. 5 and Col. 9 passages would seem to utilize a reference, e.g., href=“www.pictureiq.com/samples/nicholas.jpg” (Col. 7, line 12) or other pointer.

We also disagree that Crosby should be combined with Cox as suggested.

The Office Action suggests: “The motivation for doing so is to have [1] a watermarking method be resilient to any distortions introduced by transmission or compression algorithms as suggested by Cox and also, [2] by having oriented the data of the image and linking a metadata to an image preventing an unauthorized person to get access as it is well known in the art.” (*underlining and numbering added*). See the Office Action, page 5, last 4 lines – page 6, line 1.

We discuss these items [1] and [2] in turn.

First, the cited passages of the Crosby patent are not concerned with digital watermarking. They instead rely on an edit list to *add changes* to a low resolution image to enhance it. There is no mention in the cited passages of needing or even wanting correction of distortion for a watermarking method. Thus, the relied upon motivation would not lead one of ordinary skill in the art to combine Crosby with Cox.

Second, claims 51, 63 and 66 do not recite acts of preventing an unauthorized person to get access to metadata or the image. Rather, the claims provide methods of linking media to metadata contained in a network resource. This relied upon motivation does not address the combinations recited in the claims and would not lead one of ordinary skill to combine Crosby with Cox to achieve the claimed invention.

Claims 51, 63 and 66 should be allowed.

### **Rejections over Iwamura in view of Cox**

#### *Claims 48*

Iwamura is not understood to provide at least a sub-set of a plural-bit identifier (calculated from changed data) to a network resource to identify metadata associated with the image, and then receive from the network resource at least some of the metadata associated with the image, in combination with other features of claim 48.

The Office Action maps the Iwamura hashes H1 and H2 to the act of calculating a plural-bit identifier from data. See the Office Action, page 4, lines 7-8 of paragraph 10. We agree that a hash could be one example of a plural-bit identifier calculated from data.

The Office Action then cites Iwamura at Col. 27, lines 28-47 as teaching the previously recited act of “interrogating”.<sup>1</sup> See the Office Action, page 4, lines 8-10 of paragraph 10.

We disagree with this reasoning.

It seems to us, rather, that while the cited passage discuss hash values H1 and H2, these hash values are used for authentication through matching and are then merely stored (see, e.g., Col. 27, lines 30-31 and line 45-47).

The hash values H1 and H2 are not provided to a network resource to identify metadata associated with an image, with identified metadata being then received.

Thus, the hash values are used for authentication through matching, but not metadata identification.

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<sup>1</sup> This “interrogating” act has been reworded in claim 48, which now recites an act of “providing.”

We also find the motivation to combine Iwamura with Cox lacking.

The Office Action suggests: “The motivation for doing so is to have [1] a watermarking method be resilient to any distortions introduced by transmission or compression algorithms as suggested by Cox and also, [2] by having oriented the data of the image and linking a metadata to an image preventing an unauthorized person to get access as it is well known in the art.” (*underlining and numbering added*). See the Office Action, page 4, lines 11-17 of paragraph 10.

We discuss these items [1] and [2] in turn.

First, the relied upon motivation is that a watermarking method would be resilient to any distortions introduced by transmission or compression algorithms. Iwamura, however, relies on a compression function to generate its hash value (“The hash value is a value obtained by calculating the hash function  $h()$ , and the hash function is a compression function that seldom causes a collision.”) (*underlining added*). See Col. 27, lines 13-15.

Iwamura uses a compression function and yet doesn’t mention a distortion concern in the cited passages. If this is such a strong motivator – as suggested in the stated motivation and considering Iwamura uses a compression function – why didn’t Iwamura hint or suggest that compensation was needed?

We find the first stated motivation lacking especially since Iwamura employed a compression function but did not discuss a need to compensate for distortion.

Second, claim 48 does not recite an act of preventing an unauthorized person to get access to metadata or the image. Rather, the claim provides a method of linking an image to metadata contained in a network resource. The relied upon motivation reaches outside of the acts recited in the claim and, as such, would not lead one of ordinary skill in the art to make the proposed combination.

Claim 48 should be allowed.

*Claim 49*

We respectfully disagree with the reasoning stated in the Office Action regarding claim 49.

Recall that the Office Action suggested that a hash H1 or H2 teach the plural-bit identifier that is calculated from the changed data. See the discussion, above, regarding claim 48.

But the Office Action cites Col. 26, lines 34-36 as teaching the combination of claim 49.

This passage deals with a user terminal issuing a request including a user signature to obtain image data G. Yet there is no apparent teaching or suggestion that that this signature is the same as hash H1 or H2 - used in claim 48 as teaching the plural-bit identifier - or that the signature is calculated from the image data G.

Claim 49 should be allowed.

*Claim 58*

Claim 58 recites that an image includes an *orientation component steganographically embedded therein*, where the changing utilizes the orientation component.

The Cox patent is cited at FIG. 7 and the corresponding specification passages as meeting this combination. See the Office Action, page 4, last two lines.

We disagree with this reasoning.

FIG. 7 is "a schematic diagram of an optical embodiment of the present invention". (*underlining added*). See the Cox patent at Col. 7, lines 66-67.

Images 52 and 56 are passed, respectively, through lenses 54 and 58 where they are combined by combiner 60. See the Cox patent at Col. 14, lines 1-9. The combined images are passed through another lens 62. See the Cox patent at Col. 14, lines 9-12.

We do not see any discussion in FIG. 7 or the related Col. 14 passage of an image including an orientation component steganographically embedded therein, where the changing (of claim 48) utilizes the orientation component.

Claim 58 should be allowed.

*Claim 60*

Claim 60 specifically recites deriving a fingerprint or signature from a changed media signal. The fingerprint or signature is used to interrogate a network resource.

We traverse the suggestion that claim 60 and 48 recite identical combinations; since they don't. See the Office Action, page 5, lines 1-3.

The Office Action maps the Iwamura hashes to the act of calculating a plural-bit identifier from data. See the Office Action, page 4, lines 7-8 of paragraph 10 (the same rejection was used for both claims 48 and 60). We agree that a hash could be one example of a fingerprint or signature derived from a media signal.

The Office Action then cites Iwamura at Col. 27, lines 28-47 as teaching an act of "interrogating". See the Office Action, page 4, lines 8-10 of paragraph 10.

We respectfully disagree with this reasoning.

It seems to us, rather, that while the cited passage discusses hash values H1 and H2, these hash values are used for authentication through matching and are then stored (see, e.g., Col. 27, lines 30-31 and line 45-47).

The hash values H1 and H2 are not used to interrogate a network resource to identify metadata associated with an image, and providing at least some of the identified metadata.

Thus, while the hash values might be used for authentication they are not used for network resource interrogation and metadata identification.

We also oppose the combination of Iwamura and Cox for at least the reasons noted above with respect to claim 48.

Claim 60 should be allowed.

*Claim 61*

Claim 61 recites that a media signal includes an orientation component steganographically embedded therein, where the changing utilizes the orientation component.

The Cox patent is cited at FIG. 7 and the corresponding specification passages as meeting this combination. See the Office Action, page 5, lines 4-5 (referring to claim 58, discussed above).

We disagree with this reasoning.

FIG. 7 is “a schematic diagram of an optical embodiment of the present invention”. (underlining added). See the Cox patent at Col. 7, lines 66-67.

Images 52 and 56 are passed, respectively, through lenses 54 and 58 where they are combined by combiner 60. See the Cox patent at Col. 14, lines 1-9. The combined images are passed through another lens 62. See the Cox patent at Col. 14, lines 9-12.

We do not see any discussion in FIG. 7 or the related Col. 14 passage of a media signal including an orientation component steganographically embedded therein, where the changing (of claim 60) utilizes the orientation component.

Claim 61 should be allowed.

#### *Claim 62*

We respectfully disagree with the reasoning stated in the Office Action regarding claim 62. See page 5, lines 6-7 of the Office Action (using the same rejection as with claim 49). We traverse that notion that claims 49 and 62 recite identical features.

Recall that the Office Action suggested that a hash H1 or H2 teach the plural-bit identifier that is calculated from the changed data itself. See the discussion, above, regarding claim 48.

But the Office Action cites Col. 26, lines 34-36 as teaching the combination of claim 49.

This passage deals with a user terminal issuing a request including a user signature to obtain image data G. Yet there is no apparent teaching or suggestion that that this signature is the same as hash H1 or H2 - used in claim 48 as teaching the plural-bit identifier - or that the signature is, itself, calculated from the image data G.

Claim 49 should be allowed as well.

**Rejections over Gindele in view of Cox***Claims 54 and 66*

The Office Action correctly recognizes that Gindele does not teach or suggest correcting for distortion in received images (or media). See page 7, lines 2-3 of the Office Action.

The Office Action turns to Col. 9, lines 29-39 of Cox to remedy Gindele's deficiencies. See page 7, lines 5-7 of the Office Action.

But the cited Cox passage does not teach or suggest correcting for distortion in the received image data (claim 54) or correcting for distortion in the media (claim 66).

Rather, at best, this passage discusses locating image areas that are least likely to be affected by distortions. See, e.g., lines 29-33. There is no mention in this passage of correcting for distortion already in images or media.

Thus, even as combined as suggested, the combination would not yield the claimed invention.

Moreover, we disagree with the combination of Gindele and Cox.

For example, the Office Action suggests: "The motivation for doing so is to apply watermark in image data where the regions of the spectrum that are least affect by the distortion by correcting, elimination or determining that area." See page 7, lines 5-7 of the Office Action.

First, the cited Cox passage does not discuss *correcting or eliminating* an image area; only identifying image areas that are least affected by common signal distortions.

Second, the motivation behind the cited Cox passage (Col. 9, lines 29-39) appears to be tamper evidence and robust watermarking and not improving or allowing for inherent signal characteristics to be determined from corrected image data.<sup>2</sup>

The motivation noted in the Office Action is not harmonious with the recited claim language. Thus, one of ordinary skill in the art would not be motivated to combine the references based on the motivation stated in the Office Action.

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<sup>2</sup> "The watermark signal is then inserted into these prominent regions in a way that make any tampering create visible (or audible) defects in the data." See Cox at Col. 9, lines 39-41.



Claims 54 and 66 should be allowed.

*Claim 67*

Claim 67 recites that media includes a steganographic orientation component, with correcting utilizing the steganographic orientation component.

The Cox patent is cited at FIG. 7, the corresponding specification passages, and Col. 9, lines 20-39 as meeting this combination. See the Office Action, page 7, lines 14-16.

We disagree with this reasoning.

FIG. 7 is "a schematic diagram of an optical embodiment of the present invention". (underlining added). See the Cox patent at Col. 7, lines 66-67.

Images 52 and 56 are passed, respectively, through lenses 54 and 58 where they are combined by combiner 60. See the Cox patent at Col. 14, lines 1-9. The combined images are passed through another lens 62. See the Cox patent at Col. 14, lines 9-12.

We do not see any discussion in FIG. 7 or the related Col. 14 passage of a media signal including an orientation component steganographically embedded therein, where the changing (of claim 60) utilizes the orientation component.

The cited Col. 9, lines 20-39 passage does not teach or suggest an orientation component steganographically embedded in the content. Rather, at best, this passage discusses locating image areas that are least likely to be affected by distortions and inserting the watermark there. See, e.g., lines 29-33. There is no mention here of an inserted orientation component in selected areas.

Claim 61 should be allowed.

Information Disclosure Statement:

An Information Disclosure Statement is filed concurrently herewith. Consideration of the information listed therein is respectfully requested.

We are also including a copy – download from PAIR – of our December 6, 2004 Information Disclosure Statement and 1449. To date we have not yet received an initialed copy of the 1449. We respectfully request such an initialed copy.

Conclusion:

Applicants respectfully request an early Notice of Allowance. The Examiner is invited to contact the undersigned at 503-469-4685 if any questions remain.

(Other deficiencies of the art need not be belabored now. And we object to the repeated suggestion that some of the claims are identical to other claims. Each claim recites its own combination.)

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